

FETAL DEATHS: Introduction

SPONTANEOUS FETAL DEATHS

INTRODUCTION

A *fetal death* is the death of a human fetus that occurs prior to its expulsion or extraction from its mother, irrespective of the duration of pregnancy. In Louisiana a *spontaneous fetal death* (also referred to as stillbirth) is a fetal death that meets these criteria:

- 1. the fetus survived at least 20 weeks gestation or weighed at least 350 grams, and
- 2. the death was not the result of an induced termination of pregnancy.

Purpose of Spontaneous Fetal Death Surveillance

As with infant mortality, a high rate of fetal deaths reflects unfavorable environmental influences and unavailability of medical care. Compared with infant mortality, however, the factors contributing to fetal deaths have been studied less, limiting understanding of their etiology. Consequently, fewer prevention efforts have been initiated to reduce the rate of fetal deaths. Overall the quality of fetal death data is poorer than that of live births.

Fetal death surveillance is important in the evaluation of adverse reproductive outcomes and in the identification of factors that result in fetal deaths. The goal of fetal death surveillance is the identification of high-risk populations and the development of risk-reducing interventions.

Source of Data: Certificate of Fetal Death (Stillbirth)

Spontaneous fetal death information presented in this report is gathered from data recorded on the *Certificate of Fetal Death* for spontaneous fetal deaths that occurred to infants born to Louisiana residents during 1999. Louisiana law requires that fetal deaths of at least 20 weeks gestation or 350 grams be reported to the Vital Records Registry within 5 days of occurrence. A physician or coroner in consultation with the parent(s) completes information on the fetal death certificate.

Death statistics are compiled in accordance with World Health Organization (WHO) regulations, which require member nations to classify causes of death according to the current revision of the International Statistical Classification of Disease, Injuries, and Causes of Death. Fetal deaths that occurred in 1999 are coded in accordance with the tenth revision (ICD-10).

All of the causes of death described in this report are *underlying causes of death*, defined as the disease or injury that initiated the sequence of events leading to death. Secondary causes of death, which are also recorded on the death certificate, are not presented in this report.

The degree of registration completeness for spontaneous fetal deaths is unknown, but some under-registration is likely, especially for fetal deaths near 20 weeks gestation or under 500 grams weight at delivery. Reporting is believed to be relatively complete, however, for fetal deaths at a gestation of 28 weeks or more.

FETAL DEATH COUNTS AND RATES

In 1999, 550 fetal deaths were reported to the Vital Records Registry, with 521 of these deaths meeting Louisiana's definition of a spontaneous fetal death (i.e., the fetus survived at least 20 weeks gestation or weighed at least 350 grams).

The 29 reported fetal deaths that failed to meet these criteria have been excluded from state-level discussions of fetal deaths. They are included, however, in Table F10 (Causes of Fetal Deaths) and in parish and region tables.

Louisiana's 1999 fetal mortality rate was 7.7 fetal deaths per 1,000 live births plus fetal deaths. This rate was higher than the 1998 rate of 7.4 per 1,000 live births plus fetal deaths (Figure F1, Table F1).

The fetal mortality rate is

calculated by dividing the number of fetal deaths in a given time period by the number of live births plus fetal deaths in the same time period, then multiplying the quotient by 1,000. The rate is expressed as the number of fetal deaths per 1,000 live births plus fetal deaths.

Gestational ages reported for Louisiana fetal deaths occurring in 1995 or later are derived by using the National Center for Health

Figure F1. Fetal Death Counts and Mortality Rates Louisiana, 1989-1999

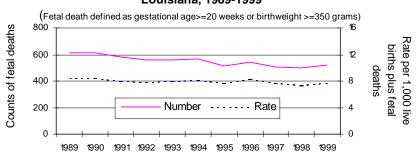


Table F1. Counts and Rates of Fetal Deaths Louisiana, 1989-1999

(Fetal death defined as gestational age >= 20 weeks or birthweight >=350 grams)

Year	Number	Rate*
1989	614	8.4
1990	611	8.4
1991	581	8.0
1992	556	7.8
1993	560	8.0
1994	564	8.2
1995	510	7.7
1996	547	8.3
1997	509	7.7
1998	495	7.4
1999	521	7.7

*Rate per 1,000 live births plus fetal deaths

statistics formula for calculation of gestational age. This formula calculates gestational age by combining information collected in the "Date Last Normal Menses Began" and "Clinical Estimate of Gestation" sections of the Louisiana Certificate of Fetal Death (Stillbirth). It also takes into account the fetal birthweight relative to gestational age. Prior to 1995, "Clinical Estimate of Gestation" was not recorded on Louisiana's Fetal Death

Certificates. Therefore, gestational ages reported for the years prior to 1995 are calculated by subtracting the "Date Last Normal Menses Began" from the "Date of Delivery", as recorded on the Fetal Death Certificates. The National Center for Health Statistics (NCHS), which reports national fetal death information, uses only gestational age (at least 20 weeks) in its definition of fetal death. To facilitate comparison between Louisiana and the United States, fetal death data

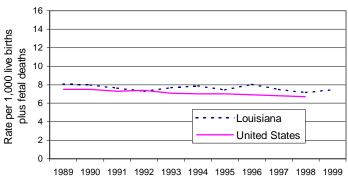
based on the NCHS definition are used in all Louisiana versus United States data presentations. Louisiana and United States fetal

mortality rates have been similar

during the past ten years, and both rates have declined over this period of time (Figure F2, Table F2).

Figure F2. Fetal Mortality Rates Louisiana and United State 1989-1999

(Fetal death defined as gestational age >=20 weeks)



Source: Louisiana State Center for Health Statistics, NationaCenter for Health Statistics

Table F2.
Fetal Mortality Rates*
Louisiana and United States, 1989-1999

(Fetal death defined as gestational age >= 20 weeks)

Year	Louisiana	United States
1989	8.1	7.5
1990	8.0	7.5
1991	7.6	7.3
1992	7.3	7.4
1993	7.7	7.1
1994	7.9	7.0
1995	7.4	7.0
1996	8.0	6.9
1997	7.5	6.8
1998	7.1	6.7
1999	7.5	Not Available

*Rate per 1,000 live births plus fetal deaths

Source: Louisiana State Center for Health Statistics, National Center for Health Statistics

MATERNAL PROFILE

Race and Age

As with the overall fetal mortality rate, race-specific rates in Louisiana have changed little over the past decade. Rates among blacks have been consistently higher than for whites over the past decade (Figure F3, Table F3). Fetal mortality rates

for blacks in Louisiana have been lower than corresponding national rates during the past decade. Rates for whites in Louisiana during the past ten years have mirrored closely the corresponding national rates. Because of differences between state and national distributions of race, Louisiana's total rates have

been slightly higher than national total rates during the past decade (Figure F4, Table F4).

Figure F3. Fetal Mortality Rates by Maternal Race Louisiana, 1989-1999

(Fetal deaths defined as gestational age >=20 weeks or birthweight >=350 grams)

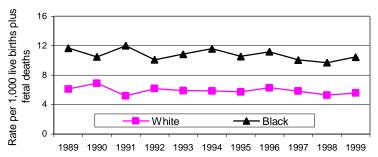


Table F3. Fetal Mortality Rates* by Maternal Race Louisiana, 1989-1999

(Fetal death defined as gestational age >=20 weeks or birthweight >=350 grams)

Voor	All Rac	es**	White	е	Blac	k
Year	Number	Rate	Number	Rate	Number	Rate
1989	614	8.4	256	6.1	353	11.7
1990	611	8.4	286	6.9	316	10.5
1991	581	8.0	211	5.2	369	12.0
1992	556	7.8	247	6.2	304	10.1
1993	560	8.0	228	5.9	326	10.9
1994	564	8.2	223	5.9	336	11.6
1995	510	7.7	215	5.7	286	10.6
1996	547	8.3	236	6.3	300	11.2
1997	509	7.7	220	5.8	276	10.1
1998	495	7.4	203	5.3	269	9.7
1999	521	7.7	215	5.6	288	10.5

^{*}Rate per 1,000 live births plus fetal deaths in race group

^{**&}quot;All Races" includes white, black, other, and unknown

Of the 521 fetal deaths, 215 fetal deaths (41.3%) were to white women, 288 (55.3%) were to black women, and 18 (3.4%) were to women of other races. Black women were almost twice as likely as white women to experience a fetal death, at a rate of 10.5 compared with 5.6 fetal deaths per

1,000 live births plus fetal deaths in race-specific groups (Table F3). This racial disparity was consistent within all age groups. Women aged 35 and older reported the highest fetal mortality rate compared with other age groups, at a rate of 10.5 fetal deaths per 1,000 live births and fetal deaths. Black mothers 35 and

older had the highest fetal mortality rates at 16.8 fetal deaths per 1,000 live births plus fetal deaths (Figure F5, Table F5).

Figure F4. Fetal Mortality Rates by Maternal Race Louisiana and United States, 1989-1999

(Fetal death defined as gestational age >=20 weeks)

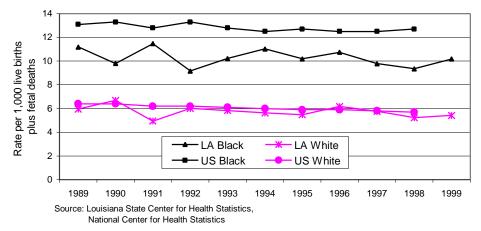


Table F4.
Fetal Mortality Rates by Maternal Race
Louisiana and United States, 1989-1999

(Fetal death defined as gestational age >=20 weeks)

		Louisiana			United States	
Year	All Races **	White	Black	All Races **	White	Black
1989	8.1	6.0	11.2	7.5	6.4	13.1
1990	8.0	6.7	9.8	7.5	6.4	13.3
1991	7.6	4.9	11.5	7.3	6.2	12.8
1992	7.3	6.0	9.2	7.4	6.2	13.3
1993	7.7	5.8	10.2	7.1	6.1	12.8
1994	7.9	5.6	11.0	7.0	6.0	12.5
1995	7.4	5.5	10.2	7.0	5.9	12.7
1996	8.0	6.2	10.8	6.9	5.9	12.5
1997	7.5	5.8	9.8	6.8 5.8		12.5
1998	7.1	5.2	9.4	6.7 5.7		12.3
1999	7.5	5.4	10.2		Not Available	

^{*}Rate per 1,000 live births plus fetal deaths

Note that Louisiana rates in this table will differ from F3, given that fetal death is defined by National Standards not Louisiana Standards.

^{**&}quot;All Races" includes white, black, other, and unknown

Figure F5. Fetal Mortality Rates by Maternal Race and Age Louisiana, 1999

(Fetal death defined as gestational age >=20 weeks and birthweight>=350)

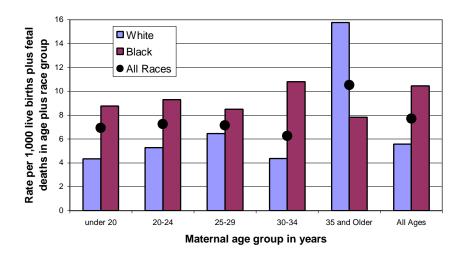


Table F5. Fetal Mortality Rates* by Maternal Race and Age Louisiana, 1999

(Fetal death defined as gestational age >=20 weeks or birthweight >=350 grams)

	Under 20		20-24		25-29		30-34		35 & Older		All Ages**	
Race	Num.	Rate	Num.	Rate	Num.	Rate	Num.	Rate	Num.	Rate	Num.	Rate
All Races**	82	6.9	153	7.3	122	7.1	72	6.3	63	10.5	521	7.7
White	21	4.3	56	5.3	72	6.5	35	4.4	29	7.3	215	5.6
Black	60	8.8	94	9.3	47	8.5	34	10.8	31	16.8	288	10.5

^{*}Rate per 1,000 live births plus fetal deaths

^{**&}quot;All Races" includes white, black, other, and unknown. "All Ages" contains age unknown.

Prenatal Care

Prenatal care is recognized as an important means of providing medical, nutritional, and educational interventions to reduce the risk of adverse pregnancy outcomes and to identify women at high risk for these outcomes. Assessing the role of prenatal care in fetal mortality, however, is complicated by differences among women in areas such as health and behavior, trimester of entry into prenatal care, and opportunity to obtain prenatal care because of shortened length of pregnancy. Also, fetal death certificates include only limited information on the content of prenatal care, and do not include information on the quality of prenatal care.

Women who received no prenatal care during pregnancy were almost seven times as likely to experience a fetal death than women who received some type of prenatal care during pregnancy. The rate of fetal deaths among women with no prenatal care was 45.2 fetal deaths per 1,000 live births plus fetal deaths. Among women who received some type of prenatal care, the rate was 6.6 (Table F6).

Examination of 1999 fetal deaths, with regard to prenatal care along racial and age differences resulted in counts smaller than twenty.

Counts less than twenty are not

Table F6. Counts and Rates* of Fetal Deaths by Prenatal Care Status and Race Louisiana, 1999

(Fetal Death defined as gestational age >= 20 weeks or birthweight >= 350 grams)

	No C	Care	Any Care				
Race	Number	Rate	Number	Rate			
All Races**	42	45.2	436	6.6			
White	13		189	4.9			
Black	29	42.4	232	8.7			

^{*}Rate of occurrence per 1,000 live births plus fetal deaths in specified group.

used to calculate rates because they are sensitive to yearly fluctuations and produce unreliable rates. To increase the size of the counts used to calculate race and age-specific prenatal care rates, data for 1996 through 1999 were combined to produce four-year (1996-1999) rates. For the years 1996 through 1999 combined fetal death rates for women with and without prenatal care during pregnancy (all races and age groups combined) were similar to those seen in 1999 alone. Among women with no prenatal care, the rate was 40.9 fetal deaths per 1,000 live births plus fetal deaths. Among women who received some type of prenatal care, the rate was 6.7.

Rates calculated using 1996-1999 aggregate data showed a higher rate of fetal deaths among women with no prenatal care was apparent in both black and white women. However, consistent with fetal death mortality trends over the last ten years, black women had a higher combined fetal rate for the four

years than white women 40.6 versus 35.9.

Combined rates for 1996-1999 showed that white women who received no prenatal care were almost seven times as likely to experience a fetal death as those with prenatal care (35.9 vs. 5.3 fetal deaths per 1,000 live births plus fetal deaths respectively). During the same time period, black women who received no prenatal care were almost five times as likely as those receiving prenatal care to experience a fetal death (40.6 vs. 8.6 fetal deaths per 1,000 live births plus fetal deaths respectively).

In all maternal age groups, the fetal death rate was consistently higher among women with no prenatal care. The highest fetal death rate (46.6) was evident among black mothers under age 20 years who had no prenatal care (Figure F6, Figure F7, and Table F7).

^{****}All Races" includes white, black, other, and unknown

[&]quot;--" indicates rate is unstable due to small number (<20) of fetal deaths

Figure F6. Aggregate Fetal Mortality Rates by Prenatal Care Status (None or Any) and Maternal Race Louisiana, 1996-1999 Combined

(Fetal deaths defined as gestational age>=20 weeks or birthweight >=350 grams)

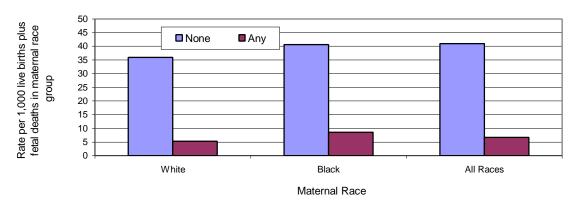


Figure F7. Aggregate Fetal Mortality Rates by Prenatal Care Status (None or Any) and Maternal Age Louisiana, 1996-1999 Combined

(Fetal deaths defined as gestational age>=20 weeks or birthweight >=350 grams)

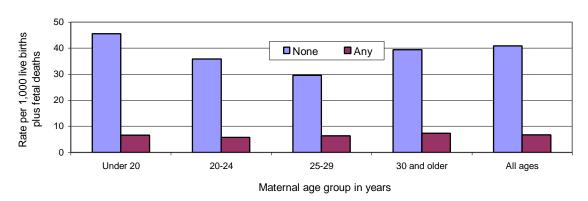


Table F7. Counts and Rates of Fetal Deaths by Prenatal Care Status, Race, and Age Louisiana, 1996-1999 combined

(Fetal Death defined as gestational age >= 20 weeks or birthweight >= 350 grams)

	Age	No C	Care	Any C	Care
Race	Group	Number	Rate	Number	Rate
	Under 20	48	45.6	318	6.6
All Races⁺	20-24	47	35.9	452	5.7
All Races	25-29	22	29.6	425	6.3
	30 and older	34	39.4	500	7.3
	All ages**	163	40.9	1753	6.7
	Under 20	9		94	4.8
White	20-24	11		160	4.0
vvriite	25-29	*		245	5.5
	30 and older	9		286	6.2
	All ages**	32	35.9	794	5.3
	Under 20	38	46.6	218	7.9
Dlook	20-24	34	32.9	283	7.6
Black	25-29	19		170	8.0
	30 and older	25	39.4	198	9.9
	All ages**	123	40.6	909	8.6

^{*}Rate of occurrence per 1,000 live births plus fetal deaths in specified group.

Medical Risk Factors for the Pregnancy

In 1994 Louisiana began collecting information describing medical risk factors for the pregnancy. Because reporting of medical conditions is believed to be incomplete for fetal deaths, as well as for live births, caution should be exercised when evaluating these data. Of the 521 fetal deaths occurring in 1999, 265 (50.9) fetal death certificates

reported no medical risk factors.

The most frequently reported medical risk factors for pregnancy resulting in fetal death were:

Anemia, pregnancy-associated hypertension, and previous pre-term or small for gestational age, with 22 fetal deaths each.

Hydramnios\Oligohydramnios,

Incompetent Cervix and Diabetes

were also prevalent risk factors for pregnancies that resulted in fetal deaths. A substantial percentage of pregnancies terminating in fetal death (17.4%) were associated with risk factors not pre-defined in the categories presented in this report (Table F8).

^{**&}quot;All ages" includes unknown ages

^{*&}quot;All Races" includes white, black, other, and unknown

[&]quot; -- " indicates rate is unstable due to small number (<20) of fetal deaths in numerator or denominator

[&]quot;*" In cell means count is less than 5

Table F8. Counts of Fetal Deaths by the Medical Risk Factors of the Pregnancy and Maternal Race Louisiana, 1999

(Fetal deaths defined as gestational age >=20 weeks or birthweight >=350grams)

Medical Risk Factor of the Pregnancy	All Races*	White	Black
No Medical Risk Factor Noted	265	118	136
Anemia (HCT<30\HGB<10)	22	6	16
Hypertension, Pregnancy Associated	22	5	17
Previous Preterm or Small for Gestation	22	7	15
Hydramnios\Oligohydraminos	19	9	10
Incompetent Cervix	18	*	15
Diabetes	15	6	18
Hypertension, Chronic	13	*	11
Genital Herpes	9	6	*
Uterine Bleeding	9	*	*
Acute or Chronic Lung Disease	*	*	0
Previous Infant 4000+ Grams	*	*	*
Cardiac Disease	*	*	0
Rh Sensitization	*	0	*
Other	91	41	47

^{*&}quot;All Races" includes white, black, other, and unknown

Tobacco and Alcohol Use during Pregnancy

At the time of delivery, the mother reports on use of tobacco and alcohol during the pregnancy. Although this information is recorded on the fetal death certificate it should be evaluated with caution because it is subject to error from inaccurate maternal recall, and because both tobacco and alcohol usage are categorized as either use or non-use, a dichotomy that does not account for different levels of usage. Examination of 1999 tobacco and alcohol use resulted in small counts (less than 20), which are not used to calculate rates

because they are sensitive to yearly fluctuations, and produce unreliable rates. To increase the size of the counts, data for 1996 through 1999 were combined to produce four-year rates.

Women who smoked and/or drank alcohol during pregnancy experienced a fetal death more often than women who did not participate in the risk behavior(s). Women who smoked during pregnancy experienced fetal deaths more often than women who did not smoke, at a rate of 8.3 per 1,000 live births plus fetal deaths among smokers, versus 7.2 per 1,000 live births plus fetal deaths among non-smokers. Women who drank during

pregnancy experienced a fetal death more than twice as often as those who did not drink, at a rate of 17.8 per 1,000 live births plus fetal deaths versus 7.2 in women who did not drink. Women who both smoked and drank alcohol during pregnancy had a fetal death rate higher than women in all other tobacco/alcohol groups, and more than three times higher than the rate seen in women who neither smoked nor drank. Fetal death rates were 22.9 fetal deaths per 1,000 live births plus fetal death in women who both smoked and drank, versus 7.1 in women who neither smoked nor drank (Figure F8, Table F9).

[&]quot;*" in cell means count is less than 5

Aggregate Fetal Mortality Rate by Tobacco and Alcohol Use During Pregnancy Louisiana 1996-1999

(Fetal deaths defined as gestational age >=20 weeks or birthweight >=350 grams)

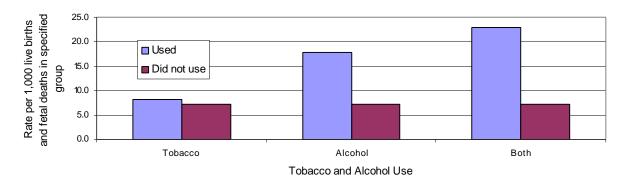


Table F9 Counts and Rates* of Fetal Deaths by Tobacco and Alcohol Use During Pregnancy, Louisiana, 1996-1999 Combined

(Fetal deaths defined as gestational age >=20 weeks or birthweight >=350 grams)

	Tobac	со	Alcoho	ol	Both		
	Number	Rate	Number	Rate	Number	Rate	
Used	228	8.3	30	17.8	26	22.9	
Did not use	1717	7.2	1910	7.2	1725	7.1	

^{*}Rate per 1,000 live births plus fetal deaths in specified group.

CAUSE OF DEATH

Given that several factors can contribute to fetal deaths, cause-of-death analyses are important for examining preventable risks. One major limitation of using the cause-of-death data from fetal death surveillance is that many fetuses who die are not autopsied or otherwise evaluated, resulting in implausible or misclassified causes of death. Evaluations of fetuses also tend to report cause of death in such a way that the fetus falls in a "catch-all" or non-specific category that prohibits in-depth analysis. For instance, one-quarter (25.0%) of the 550 fetal deaths reported in Louisiana in 1999 were classified under "Other conditions originating in the perinatal period." Nearly another quarter (23.3%) were classified under "Fetal death of unspecified cause". Fetal deaths described in this section include all fetal deaths reported to the Vital Records Registry in 1999, regardless of gestational age or birthweight.

The leading cause of fetal death was "conditions originating in the perinatal period" (728.0 fetal deaths per 1,000 live births and fetal deaths), the most frequent (225.3 fetal deaths per 1,000 live births and fetal deaths) of these being "fetus affected by complications of placenta, cord and membranes". The ratio of fetal death caused by complications of placenta, cord and membranes was higher among black women at 290.1 occurrences per 100,000 live births, versus 185.1 in whites.

Table F10 summarizes fetal deaths reported to Louisiana in 1999 by cause, maternal age, and maternal race.

Table F10.
Fetal Deaths by Selected Causes (ICD-10 Code), Age and Race of Mother Louisiana, 1999

ICD 10 Course of Fotal Dooth					M	faternal /	Age					
ICD-10 Cause of Fetal Death	Race	Ratio ⁺	All	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Unk
All causes	All	820.5	550	0	88	158	129	77	56	13	0	29
	White	612.8	235	0	25	58	75	38	29	6	0	,
	Black	1112.6	303	0	62	97	51 *	36	25	7	0	25
19	Other	827.6	12	0	*	*	*	*	*	0	0	
In situ neoplasms, benign neoplasms and neoplasms of uncertain or unknown	All White	1.5 2.6	*	0	0	0	*	0	0	0 0	0	(
behavior (D00-D48)	Black	0	0	0	0	0	0	0	0	0	0	
200 2 10)	Other	0	0	0	0	0	0	0	0	0	0	Ċ
Certain conditions originating in the	All	728.0	488	0	82	147	113	61	49	9	0	27
perinatal period (P00-P96)	White	513.7	197	0	21	52	64	26	26	*	0	,
	Black	1039.1	283	0	60	92	47	33	23	5	0	23
	Other	551.7	8	0	*	*		*	0	0	0	<u> </u>
Fetus affected by maternal conditions that may be unrelated to present pregnancy	All White	40.3 15.6	27 6	0	7 0	5 *	8	*	0	0	0	Ċ
(P00)	Black	77.1	21	0	7	*	*	*	*	*	0	,
(1 00)	Other	0	0	0	0	0	0	0	0	0	0	(
Fetus affected by maternal hypertensive	All	31.3	21	0	6	*	7	*	*	*	0	,
disorders (P00.0)	White	7.8	*	0	0	*	*	0	0	0	0	C
	Black	66.1	18	0	6	*	5	*	*	*	0	,
	Other	0	0	0	0	0	0	0	0	0	0	
Fetus affected by maternal infectious and	All White	3.0	*	0	0	*	0		0	0	0	(
parasitic diseases (P00.2)	Black	2.6 3.7	*	0	0	0	0	0	0	0 0	0	(
	Other	0	0	0	0	0	0	0	0	0	0	(
Fetus affected by maternal injury (P00.5)	All	6.0	*	0	*	*	*	*	0	0	0	
etus affected by maternal injury (P00.5)	White	5.2	*	0	0	0	*	*	0	0	0	C
	Black	7.3	*	0	*	*	0	0	0	0	0	C
	Other	0	0	0	0	0	0	0	0	0	0	C
Fetus affected by maternal complications of	All	86.5	58	0	6	16	16	7	*	0	0	9
pregnancy (P01)	White Black	36.5 146.9	14 40	0	*	12	6 9	5	*	0 0	0	9
	Other	275.9	40 *	0	0	1Z *	*	*	0	0	0	(
Fetus affected by incompetent cervix	All	11.9	8	0	*	*	*	0	0	0	0	,
(P01.0)	White	5.2	*	0	*	0	*	0	0	Ō	0	C
	Black	18.4	5	0	0	*	*	0	0	0	0	,
	Other	69.0	*	0	0	*	0	0	0	0	0	C
Fetus affected by premature rupture of	All	62.7	42	0	*	10	11	6	*	0	0	7
membranes (P01.1)	White	18.3	7	0	*	*	*	0	*	0	0	(
	Black Other	121.2 137.9	33	0	0	8	8	5 *	0	0 0	0	7
Fetus affected by polyhydramnios (P01.3)	All	1.5	*	0	0	0	0	*	0	0	0	
retus arrected by polytrydrammos (1 01.5)	White	2.6	*	0	0	0	0	*	0	0	0	
	Black	0	0	0	0	0	0	0	0	Ō	0	Ċ
	Other	0	0	0	0	0	0	0	0	0	0	C
Fetus affected by multiple pregnancy	All	6.0	*	0	0	*	*	0	0	0	0	C
(P01.5)	White	7.8	*	0	0	0	*	0	0	0	0	C
	Black	3.7	^	0	0		0	0	0	0	0	C
Fetus affected by other and unspecified	Other All	0 4.5	0	0	0	0	0	0	0	0	0	,
maternal complications of pregnancy	White	2.6	*	0	*	0	0	0	0	0	0	C
(P01.8-P01.9)	Black	3.7	*	0	0	0	0	0	0	0	0	,
,	Other	69.0	*	0	Ö	*	Ö	Ő	Ö	0	0	(
Fetus affected by complications of placenta,	All	225.3	151	0	27	51	31	17	17	*	0	<u> </u>
cord and membranes (P02)	White	185.1	71	0	6	23	23	6	9	*	0	*
	Black	290.1	79	0	20	28	8	11	8	*	0	,
	Other	69.0	*	0	*	0	0	0	0	0	0	C

^{*}Ratio per 100,000 live births.

Table F10.
Fetal Deaths by Selected Causes (ICD-10 Code), Age and Race of Mother Louisiana, 1999

					N	1aternal	Age					
ICD-10 Cause of Fetal Death	Race	Ratio ⁺	All	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Unk.
Fetus affected by placenta previa (P02.0)	All	3.0	*	0	*	0	*	0	0	0	0	0
	White	2.6	*	0	0	0	*	0	0	0	0	0
	Black	3.7	*	0	*	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	
Fetus affected by other forms of placental	All White	83.5	56 28	0	14	21	13	5			0	
separation and hemorrhage (P02.1)	Black	73.0 99.1	26 27	0	6 7	10 11	10	*	0	0	0	0
	Other	69.0	*	0	*	0	0	0	0	0	0	0
Fetus affected by other and unspecified	All	23.9	16	0	0	5	*	*	7	0	0	*
morphological and functional abnormalities	White	28.7	11	0	0	*	*	0	7	Ō	0	0
of placenta (P02.2)	Black	18.4	5	0	0	*	0	*	0	0	0	*
	Other	0	0	0	0	0	0	0	0	0	0	0
Fetus affected by placental transfusion	All	1.5	*	0	0	*	0	0	0	0	0	0
syndromes (P02.3)	White	0	0	0	0	0	0	0	0	0	0	0
	Black	3.7	Ô	0	0		0	0	0	0	0	0
Fetus affected by prolapsed cord (P02.4)	Other All	0 1.5	*	0	0	0	0	0	0	0	0	0
retus affected by prolapsed cord (P02.4)	White	2.6	*	0	0	0	0	*	0	0	0	0
	Black	0	0	0	0	0	0	0	0	0	0	0
	Other	0	Ö	0	0	0	0	0	0	Ö	Ö	Ö
Fetus affected by other compression of	All	37.3	25	0	*	7	5	5	*	*	0	0
umbilical cord (P02.5)	White	26.1	10	0	0	*	*	*	*	*	0	0
	Black	55.1	15	0	*	*	*	*	*	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Fetus affected by other and unspecified	All	44.8	30	0	6	9	8	*	*	*	0	*
conditions of umbilical cord (P02.6)	White	44.3	17 13	0	0	5	7	*	*		0	^
	Black Other	47.7 0	0	0	6 0	0	0	0	0	0 0	0	0
Fetus affected by chorioamnionitis (P02.7)	All	29.8	20	0	*	8	*	*	*	0	0	*
retas arrested by enorical milentile (1 02.7)	White	7.8	*	0	0	*	0	0	0	0	0	0
	Black	62.4	17	0	*	5	*	*	*	0	0	*
	Other	0	0	0	0	0	0	0	0	0	0	0
Fetus affected by other complications of	All	4.5	*	0	*	*	*	0	0	0	0	0
labor and delivery (P03)	White	2.6	*	0	0	*	0	0	0	0	0	0
	Black	7.3	*	0	*	0	*	0	0	0	0	0
Tatus offeeted by breech delivery and	Other	0 1.5	0	0	0	0	0	0	0	0	0	0
Fetus affected by breech delivery and extraction (P03.0)	All White	2.6	*	0	0	*	0	0	0	0	0	0
extraction (1 03.0)	Black	2.0	0	0	0	0	0	0	0	0	0	0
	Other	0	Ö	0	0	0	0	0	0	0	0	0
Fetus affected by abnormal uterine	All	3.0	*	0	*	0	*	0	0	0	0	0
contractions (P03.6)	White	0	0	0	0	0	0	0	0	0	0	0
	Black	7.3	*	0	*	0	*	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Fetus affected by noxious influences	All	1.5	*	0	0	*	0	0	0	0	0	0
transmitted via placenta (P04)	White	0	0	0	0	0	0	0	0	0	0	0
	Black Other	3.7 0	0	0	0	0	0	0	0	0 0	0	0 0
Slow fetal growth and fetal malnutrition	All	3.0	*	0	0	0	*	0	0	0	0	0
(P05)	White	0.0	0	0	0	0	0	0	0	0	0	0
\/	Black	7.3	*	0	0	0	2	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Disorders related to short gestation and low	All	101.4	68	0	14	19	19	5	7	0	0	*
birth weight, not elsewhere classified (P07)	White	60.0	23	0	*	7	10	0	*	0	0	*
	Black	161.6	44	0	11	11	9	5	5	0	0	*
⁺ Ratio per 100 000 live hirths	Other	69	*	0	0	1	0	0	0	0	0	0

[†]Ratio per 100,000 live births.

Table F10.
Fetal Deaths by Selected Causes (ICD-10 Code), Age and Race of Mother Louisiana, 1999

					N	1aternal	Age					
ICD-10 Cause of Fetal Death	Race	Ratio ⁺	All	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Unk.
Extremely low birth weight or extreme	All	47.7	32	0	8	9	11	*	*	0	0	*
immaturity (P07.0,P07.2)	White	31.3	12	0	*	*	6	0	0	0	0	0
	Black	73.4	20	0	6	5	5	*	*	0	0	*
	Other	0	0	0	0	0	0	0	0	0	0	
Other low birth weight and preterm	All	53.7	36	0	6	10	8		5	0	0	*
(P07.1,P07.3)	White Black	28.7 88.1	11 24	0	5	6	*	0	*	0 0	0	*
	Other	69.0	24 *	0	0	*	0	0	0	0	0	0
Intrauterine hypoxia and birth asphyxia	All	10.4	7	0	*	*	*	0	*	0	0	0
(P20-P21)	White	10.4	*	0	0	*	*	0	*	0	0	0
,	Black	11	*	0	*	*	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Intrauterine hypoxia, unspecified (P20.9)	All	10.4	7	0	*	*	*	0	*	0	0	0
	White	10.4	*	0	0	*	*	0	*	0	0	0
	Black	11.0	*	0	*	*	0	0	0	0	0	0
Oth as a serior to as a distance existing the single	Other	0	0	0	0	0	0	0	0	0	0	0
Other respiratory conditions originating in the perinatal period (P23-P28)	All White	1.5	0	0	0	0	0	0	0	0 0	0	0
the permatal period (1 23-1 20)	Black	3.7	*	0	0	0	*	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Other respiratory system disorders (P26-	All	1.5	*	0	0	0	*	0	0	0	0	0
P27,P28.2-P28.9)	White	0	0	0	0	0	0	0	0	0	0	0
•	Black	3.7	*	0	0	0	*	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Infections specific to the perinatal period	All	7.5	5	0	0	0	*	*	*	0	0	*
(P35-P39)	White	5.2	*	0	0	0	0	*	0	0	0	*
	Black	11.0	*	0	0	0	*	0		0	0	*
Congenital harmonizal (harmon simpley)	Other All	0 1.5	0	0	0	0	0	0	0	0	0	
Congenital herpesviral (herpes simplex) infection (P35.2)	White	2.6	*	0	0	0	0	0	0	0	0	*
infection (i 33.2)	Black	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Bacterial sepsis (P36)	All	1.5	*	0	0	0	0	*	0	0	0	0
. , ,	White	2.6	*	0	0	0	0	*	0	0	0	0
	Black	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Other infections specific to the perinatal	All	4.5	*	0	0	0	*	0	*	0	0	*
period (P35.8-P35.9,P37.2-P37.9,P38-P39)	White	0	0	0	0	0	0	0	0	0	0	0
	Black Other	11.0 0	0	0	0	0	0	0	0	0 0	0	0
Fetal hemorrhage (P50-P54)	All	4.5	*	0	*	*	0	*	0	0	0	0
r etai nemormage (r 30-r 34)	White	7.8	*	0	*	*	0	*	0	0	0	0
	Black	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Hemolytic disease of fetus (P55-P56)	All	1.5	*	0	0	0	0	0	*	0	0	0
	White	2.6	*	0	0	0	0	0	*	0	0	0
	Black	0	0	0	0	0	0	0	0	0	0	0
01. 1. 1.0. 1	Other	0	0	0	0	0	0	0	0	0	0	0
Other hemolytic disease of fetus (P55.8-	All	1.5	*	0	0	0	0	0	*	0	0	0
P55.9)	White	2.6	0	0	0	0	0	0		0	0	0
	Black Other	0	0	0	0	0	0	0	0	0 0	0	0
Transitory endocrine and metabolic	All	6.0	*	0	0	*	*	0	0	0	0	0
disorders specific to fetus (P70-P74)	White	0.0	0	0	0	0	0	0	0	0	0	0
	Black	14.7	*	0	0	*	*	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
+Patio per 100 000 live hirths	1 2 31		J									<u> </u>

^{*}Ratio per 100,000 live births.

Table F10.
Fetal Deaths by Selected Causes (ICD-10 Code), Age and Race of Mother Louisiana, 1999

ICD-10 Cause of Fetal Death	Maternal Age											
	Race	Ratio ⁺	All	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Unk.
Syndrome of infant of a diabetic mother and	All	6.0	*	0	0	*	*	0	0	0	0	0
neonatal diabetes mellitus (P70.0-P70.2) Other conditions originating in the perinatal	White	0	0	0	0	0	0	0	0	0	0	0
	Black	14.7	*	0	0	*	*	0	0	0	0	0
	Other All	0 205.9	0 138	0	23	0 44	0 26	22	13	0	0	7
period (P80-P96)	White	159.1	61	0	23 7	13	17	13	9	*	0	/ *
	Black	275.4	75	0	16	31	8	8	*	*	0	6
	Other	137.9	*	0	0	0	*	*	0	0	0	0
Hydrops fetalis not due to hemolytic disease (P83.2)	All	10.4	7	0	0	*	*	*	0	0	0	0
	White	7.8	*	0	0	0	*	*	0	0	0	0
	Black	14.7	*	0	0	*	*	*	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Fetal death of unspecified cause (P95)	All White	190.9 146.0	128 56	0	23 7	40 12	23 15	19 11	13 9	*	0	7
	Black	257.0	70	0	16	28	7	7	*	*	0	6
	Other	137.9	*	Ő	0	0	*	*	0	0	0	0
All other specified conditions originating in	All	4.5	*	0	0	*	0	*	0	0	0	0
the perinatal period (P80-P81,P83.0-	White	5.2	*	0	0	*	0	*	0	0	0	0
P83.1,P83.3-P83.9, P90-P91,P93-	Black	3.7	*	0	0	*	0	0	0	0	0	0
P94,P96.0,P96.3,P96.8)	Other	0	0	0	0	0	0	0	0	0	0	<u>0</u>
Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)		91.0	61	0	6	11	15	16	7	*	0	
chromosomai abnormaililes (Q00-Q99)	White Black	96.5 73.4	37 20	0	*	6 5	10	12	*	*	0	0
	Other	275.9	*	0	0	0	*	*	*	0	0	0
Congenital malformations of nervous	All	16.4	11	0	*	*	*	*	*	0	0	*
system (Q00-Q07)	White	13.0	5	0	*	*	*	*	0	0	0	0
	Black	22.0	6	0	*	*	0	2	*	0	0	*
-	Other	0	0	0	0	0	0	<u> </u>	0	0	0	
Anencephaly and similar malformations	All White	13.4 13.0	9 5	0	*	*	2	*	0	0 0	0	0
(Q00)	Black	14.7	*	0	*	*	0	*	0	0	0	*
	Other	0	0	0	0	0	0	0	0	0	0	0
Congenital hydrocephalus (Q03)	All	1.5	*	0	0	0	0	0	*	0	0	0
	White	0	0	0	0	0	0	0	0	0	0	0
	Black	3.7	*	0	0	0	0	0	*	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Other congenital malformations of spinal	All	1.5	*	0	0	0	0	*	0	0	0	0
cord and nervous system (Q06-Q07)	White Black	0 3.7	0	0	0	0	0	0	0	0 0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Congenital malformations of heart (Q20-	All	4.5	*	0	0	*	*	*	0	0	0	0
Q24)	White	7.8	*	0	0	*	*	*	0	Ō	0	0
	Black	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Other congenital malformations of	All	1.5	*	0	0	0	0	*	0	0	0	0
circulatory system (Q25-Q28)	White	2.6	*	0	0	0	0	*	0	0	0	0
	Black Other	0	0	0	0	0	0	0	0	0 0	0	0
Congenital malformations of lung (Q33)	All	1.5	*	0	0	0	0	*	0	0	0	0
	White	2.6	*	0	0	0	0	*	0	0	0	0
	Black	0	0	0	Ö	Ő	Ö	0	Ö	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Congenital malformations of urinary system	All	4.5	*	0	0	*	*	*	0	0	0	0
(Q60-Q64)	White	2.6	*	0	0	0	*	0	0	0	0	0
	Black	3.7	*	0	0	*	0	0	0	0	0	0
[†] Patio per 100 000 live hirths	Other	69.0	*	0	0	0	0	*	0	0	0	0

^{*}Ratio per 100,000 live births.

Table F10.
Fetal Deaths by Selected Causes (ICD-10 Code), Age and Race of Mother Louisiana, 1999

ICD-10 Cause of Fetal Death	Maternal Age											
	Race	Ratio⁺	All	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45+	Unk.
Renal agenesis and other reduction defects of kidney (Q60)	All	1.5	*	0	0	0	*	0	0	0	0	0
	White	2.6	*	0	0	0	*	0	0	0	0	0
	Black	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Cystic kidney disease (Q61)	All	1.5	*	0	0	*	0	0	0	0	0	0
	White	0	0	0	0	0	0	0	0	0	0	0
	Black Other	3.7	0	0	0	0	0	0	0	0 0	0	0
Other congenital malformations of urinary	All	1.5	*	0	0	0	0	*	0	0	0	0
system (Q62-Q64)	White	0	0	0	0	0	0	0	0	0	0	0
	Black	0	0	0	0	0	0	0	0	0	0	0
	Other	69.0	*	0	0	0	0	*	0	0	0	0
Congenital malformations and deformations	All	1.5	*	0	0	*	0	0	0	0	0	0
of musculoskeletal system, limbs and	White	0	0	0	0	0	0	0	0	0	0	0
integument (Q65-Q85)	Black	3.7	*	0	0	*	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Other congenital malformations (Q86-Q89) Conjoined twins (Q89.4)	All	25.4	17	0	*	*	6	*	*	0	0	*
	White	23.5	9	0	*	0	*	*	*	0	0	0
	Black	22.0	6	0	*	*	*	0	0	0	0	*
	Other	137.9	*	0	0	0	0	0	*	0	0	0
	All	1.5	*	0		0	0	0	0	0	0	0
	White	0	0	0	0	0	0	0	0	0	0	0
	Black Other	3.7	0	0	0	0	0	0	0	0 0	0	0
Multiple congenital malformations, not	All	20.9	14	0	*	*	*	*	*	0	0	*
elsewhere classified (Q89.7)	White	20.9	8	0	*	0	*	*	*	0	0	0
	Black	14.7	*	0	0	*	*	0	0	0	0	*
	Other	137.9	*	0	0	0	0	0	*	0	0	0
All other congenital malformations (Q86-Q87,Q89.0-Q89.3,Q89.8-Q89.9)	All	3.0	*	0	0	0	*	0	0	0	0	0
	White	2.6	*	0	0	0	*	0	0	0	0	0
	Black	3.7	*	0	0	0	*	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Chromosomal abnormalities, not elsewhere classified (Q90-Q99)	All	35.8	24	0	*	5	5	6	*	*	0	0
	White	44.3	17	0	*	*	*	5	*	*	0	0
	Black	22.0	6	0	0		*				0	0
	Other	69.0	*	0	0	0		0	0	0	0	0
Down's syndrome (Q90)	All White	1.5	*	0	-	0	0	0	0	*	0	-
	Black	2.6 0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Edward's syndrome (Q91.0-Q91.3)	All	13.4	9	0	0	*	*	*	*	*	0	0
	White	13.0	5	0	0	*	*	*	0	*	0	0
	Black	14.7	*	0	0	*	0	*	*	*	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0
Patau's syndrome (Q91.4-Q91.7)	All	6.0	*	0	0	0	2	*	0	*	0	0
	White	2.6	*	0	0	0	0	*	0	0	0	0
	Black	7.3	*	0	0	0	*	0	0	*	0	0
	Other	69.0	*	0	0	0	*	0	0	0	0	0
Other chromosomal abnormalities, not elsewhere classified (Q92-Q99) Other causes of death under ICD-10 codes a	All	14.9	10	0	*	*	*	*	*	0	0	0
	White	26.1	10	0	*	*	*	*	*	0	0	0
	Black	0	0	0	0	0	0	0	0	0	0	0
	Other	0	0	0	0	0	0	0	0	0	0	0

Other causes of death under ICD-10 codes exist for fetal deaths. They are not included in Table F10 as they had no counts for 1999.

^{*}Ratio per 100,000 live births.

^{*} in cell means count is less than 5.